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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 436,520	11 09 1999	CLARENCE D. CHANG	10054-2	6761

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EXAMINER	
ILDEBRANDO, CHRISTINA A	
ART UNIT	PAPER NUMBER
1754	

DATE MAILED: 01 02 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/436,520

Applicant(s)

CHANG ET AL.

Examiner

Christina Ildebrando

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 7-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/10/01 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsao.

Tsao (US 5,384,296) discloses a catalyst composition useful in isomerization processes. The catalyst composition contains a zeolite such as MCM-22 (column 3, line 7, and column 4, lines 30-35). Tsao teaches that the catalyst contains noble metal components selected from group VIII, including ruthenium, as hydrogenation components, and a non-noble metal, including zinc, cobalt, and nickel as promoters (column 4, lines 9-30).

It has been held that when the compound is not specifically named, but instead it is necessary to select portions of teachings within a reference and combine them, e.g.

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select various substituents from a list of alternatives given for placement at specific sites on a generic chemical formula to arrive at a specific composition, anticipation can only be found if the classes of substituents are sufficiently limited or well delineated. *Ex parte* A, 17USPQ2d 1716. If one of ordinary skill in the art is able to "at once envisage" the specific compound within the generic chemical formula, the compound is anticipated. One of ordinary skill in the art must be able to draw the structural formula or write the name of each of the compounds included in the generic formula before any of the compounds can be "at once envisaged." Refer also to *In re Schauman*, 197 USPQ 5 and MPEP 2131.02.

In this case, it is considered that one of ordinary skill would have been able to at once envision the instantly claimed catalyst composition, based upon the disclosure of the reference. It is the position of the examiner that the reference teaches the generic chemical formula – zeolite/noble metal/base metal - and clearly discloses each of the substituent elements. It is the position of the examiner that the teachings of the reference are drawn to a class of metals sufficiently limited to constitute anticipation.

4. Claims 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Del Rossi et al.

Del Rossi et al. (US 5,108,969) discloses a catalyst composition useful in hydrocarbon conversion processes. The reference teaches and claims an MCM-22 zeolite having a group VIII metal and tin thereon (column 8, lines 37-46 and claim 1).

The reference does not specifically teach the metal ruthenium but instead teaches the use of Group VIII metals. It has been held that when the compound is not

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specifically named, but instead it is necessary to select portions of teachings within a reference and combine them, e.g. select various substituents from a list of alternatives given for placement at specific sites on a generic chemical formula to arrive at a specific composition, anticipation can only be found if the classes of substituents are sufficiently limited or well delineated. *Ex parte A*, 17USPQ2d 1716. If one of ordinary skill in the art is able to "at once envisage" the specific compound within the generic chemical formula, the compound is anticipated. One of ordinary skill in the art must be able to draw the structural formula or write the name of each of the compounds included in the generic formula before any of the compounds can be "at once envisaged." Refer also to *In re Schauman*, 197 USPQ 5 and MPEP 2131.02.

It is the position of the examiner that the teachings of the reference are drawn to a class of metals sufficiently limited to constitute anticipation. It is considered that one of ordinary skill would have been able to at once envision ruthenium as a group VIII metal taught by the reference.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao.

Tsao is applied as above.

If in fact it is considered that the reference does not disclose the claimed composition with sufficient specificity to constitute anticipation, it is the position of the examiner that the claims would have been obvious to one of ordinary skill in the art. If the prior art does not in fact anticipate the instant claims, then the claims would have been obvious to one of ordinary skill in the art. *Ex parte Lee*, 31 USPQ 2d. 1105.

In this case, the reference teaches a group of metals that places the claimed specie in the possession of the public as in *In re Schaumann*, 197 USPQ 5, and therefore of the reference does not anticipate the claims, said claims would have been obvious to one of ordinary skill in the art. The reference teaches that each of the substituents are analogous and functionally equivalent. Therefore, one of ordinary skill would have reasonable expectation of success through the choice of any of the disclosed substituents, including those of the claims.

7. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Del Rossi et al.

Del Rossi et al. is applied as described above.

If in fact it is considered that the reference does not disclose the claimed composition with sufficient specificity to constitute anticipation, it is the position of the examiner that the claims would have been obvious to one of ordinary skill in the art. If the prior art does not in fact anticipate the instant claims, then the claims would have been obvious to one of ordinary skill in the art. *Ex parte Lee*, 31 USPQ 2d. 1105.

In this case, Del Rossi et al. does not disclose the use of the specific metal, ruthenium but teaches the generic group of compounds, "Group VIII metals". The

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claims differ from the reference by reciting a specific species and a more limited genus than the reference. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to select any of the species taught by the reference, including those of the claims, because an ordinary artisan would have the reasonable expectation that any of the species of the genus would have similar properties and, thus, the same use as the genus as a whole.

### ***Response to Arguments***

8. Applicant's arguments filed 10/10/01 have been fully considered but they are not persuasive.

With regards to the rejection over Tsao, applicant argues that there is no disclosure in Tsao to direct the skilled worker to select the particular combination of zeolite, group VIII metal, and metal promoter as recited in instant claim 7. It is argues that the only example provided by the reference is a catalyst comprising zeolite beta. Applicant further argues that Tsao fails to constitute anticipation within the meaning of 35 USC 102(b).

These arguments have been considered but are not persuasive. First, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). The fact that only zeolite beta is exemplified does not constitute a teaching away of other zeolites.

Next, it is the position of the examiner that the reference does disclose the claimed composition with sufficient specificity to constitute anticipation. In this case, the reference clearly discloses a generic formula and clearly names suitable substituents, including the components instantly claimed. It is the position of the examiner that one of ordinary skill would have been able to at once envisage each and every combination contemplated by the reference and as such, the teachings of the reference are sufficient to warrant anticipation. In the alternative, it is the position of the examiner that the teachings of the reference, if in fact are not anticipatory, would then have rendered the claimed combination obvious.

With regards to the rejection over Del Rossi et al., applicant argues that to anticipate a claim, each and every element must be named. However, as discussed in the previous office action, it has been held that anticipation can be found if the classes of substituents are sufficiently limited or well-delineated. It is the position of the examiner that the teachings of Del Rossi et al. are sufficiently limited or well delineated to constitute anticipation. The reference teaches "Group VIII metals," of which group one of ordinary skill would immediately be able to envision each and every member. Alternatively, it is the position of the examiner that the teaching of the genus "group VIII metals" would render the species "ruthenium" obvious.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Ildebrando whose telephone number is (703)

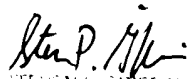


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305-0469. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

  
STEVEN P. GRIFFIN  
SUPERVISORY PATENT EXAMINER  
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CAI  
December 30, 2001